For Research Use Only

## Phospho-TSC2 (Ser939) Recombinant antibody

Catalog Number:81654-1-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

81654-1-RR BC150300 GeneID (NCBI):

100ul , Concentration: 500 ug/ml by Nanodrop;

**UNIPROT ID:** Source: P49815 Rabbit

Full Name: Isotype: tuberous sclerosis 2 IgG

Calculated MW: 1807 aa, 201 kDa Observed MW: 200 kDa

**Purification Method:** Protein A purification

2B18

CloneNo.:

Recommended Dilutions: WB 1:1000-1:5000

**Applications** 

**Tested Applications:** WB, FC (Intra), ELISA Species Specificity:

human

Positive Controls:

WB: Calyculin A treated HEK-293 cells,

## **Background Information**

TSC2, also named Tuberin, plays an essential role in the cellular energy response pathway. TSC2 forms a physical and functional complex with TSC1 that can inhibit the nutrient-mediated or growth factor-stimulated  $phosphorylation\ of\ S6K1\ and\ EIF4EBP1\ by\ negatively\ regulating\ mTORC1\ signaling.\ Tuberin\ is\ phosphorylated\ on$ Ser939 and Thr1462 in response to PI3K activation and the human TSC complex is a direct biochemical target of the PI3K/Akt pathway (PMID: 12150915).

Storage

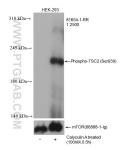
Store at -20°C. Stable for one year after shipment.

Aliquoting is unnecessary for -20°C storage

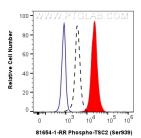
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**



Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 81654-1-RR (Phospho-TSC2 (Ser939) antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with mTOR antibody (66888-1-lg) as the loading control.



1X10^6 HEK-293 cells untreated (dashed lines) or treated with Calyculin A were intracellularly stained with 0.06 ug Phospho-TSC2 (Ser939) Recombinant antibody (81654-1-RR, Clone:2B18) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.06 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.